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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2024/2025ACADEMIC YEAR THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (BUSINESS ADMINISTRATION)

Date: 6th December, 2024 Time: 2.30pm –4.30pm

KGM 2401 - IMPLEMENTING TOTAL QUALITY

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS_

QUESTION ONE (30 MARKS)

CASE STUDY

IMPLEMENTING TOTAL QUALITY MANAGEMENT (TQM) AT XYZ MANUFACTURING

TESCO Manufacturing is a medium-sized company that produces auto parts. In recent years, the company had been facing increasing competition, customer complaints, and a decline in product quality. To address these challenges, the management team decided to implement Total Quality Management (TQM) to improve quality, reduce defects, and enhance customer satisfaction. The TQM approach aimed to involve all employees in the continuous improvement of processes, products, and services. The company focused on customer-centric practices, process optimization, and reducing waste. The implementation process included training employees, setting up quality circles, and establishing key performance indicators (KPIs).Key Steps in TQM Implementation at TESCO Manufacturing included: leadership commitment where senior management took the lead by communicating the importance of quality and committing resources to the initiative.

Employees at all levels were trained in quality improvement techniques like Six Sigma, Kaizen, and process mapping to ensure their involvement and small groups of employees from different departments formed quality circles to address specific quality issues. A culture of continuous improvement was fostered by encouraging employees to suggest process improvements and feedback from customers was actively sought and used to drive improvements in product quality. Data-driven decision-making was emphasized where tools like Pareto charts, cause-and-effect diagrams, and control charts were introduced to monitor and improve processes. Key Performance Indicators (KPIs) such as defect rates, customer satisfaction scores, and process efficiency were established to track progress.After a year of TQM implementation, TESCO Manufacturing experienced the following improvements: A 25% reduction in defect rates, a 15% increase in customer satisfaction scores, a 10% reduction in production costs due to improve efficiency and reduced waste and increased employee engagement, with employees actively participating in quality circles and contributing ideas for improvement.

Questions:

- a) Explain how leadership commitment influenced the success of TQM implementation at TESCO Manufacturing. (6 marks)
- b) Discuss specific actions by senior management which ensured employee involvement in the TQM process.

(6 marks)

c) Determine how the use of tools such as Pareto charts and cause-and-effect diagrams helped in identifying and addressing process inefficiencies at TESCO Manufacturing.

(6 marks)

d) Analyze why defect rates, customer satisfaction scores, and process efficiency were chosen as Key Performance Indicators (KPIs), to reflect the success of TQM implementation.

(6 marks)

e) Based on TESCO Manufacturing's experience, what recommendations would you make for another organization attempting to implement TQM to address similar challenges? (6 marks)

QUESTION TWO (20 MARKS)

- a) Outline how the principles of Total Quality Management (TQM) can be integrated into organizational processes to address challenges such as declining product quality and customer dissatisfaction. (5 marks)
- b) Determine ways in which quality standards provide measurable benefits to organizations.

(5 marks)

- c) Explain how implementing quality control practices help organizations achieve improved operational efficiency. (5 marks)
- d) Discuss how the steps involved in the Root Cause Analysis (RCA) process can be applied to identify and resolve recurring quality issues in a manufacturing setting. (5 marks)

QUESTION THREE (20 MARKS)

a) Identify three strategies which an organization can employ to ensure successful integration of Total Quality Management (TQM) into its existing operational processes.

(5 marks)

b) Determine ways organizational culture impacts Total Quality Management (TQM).

(5 marks)

- c) Explain how key components of quality control can be applied to ensure consistent product quality in a manufacturing environment. (5 marks)
- d) Describe how an organization can address potential challenges during the implementation of TQM. (5 marks)

QUESTION FOUR (20 MARKS)

- a) Describe five ways an organization can adapt and apply Total Quality Management (TQM) best practices to address specific industry challenges. (5 marks)
- b) Identify five practices organizations can use to foster and sustain a positive organizational culture to enhance overall performance. (5 marks)
- c) Explain how managers can effectively address resistance to change within an organization to ensure smooth and successful implementation of new initiatives. (5 marks)
- d) Discuss how an organization can apply core principles of lean manufacturing to improve efficiency. (5 marks)

QUESTION FIVE(20 MARKS)

- a) Determine the role of leadership in the successful implementation of Total Quality Management (TQM). (5 marks)
- b) Describe how quality control can contribute to building an organization's reputation to foster long-term trust with customers. (5 marks)
- c) Kaizen, which means "continuous improvement" in Japanese, is a key component of (TQM). Discuss the major steps involved in the Kaizen process. (5 marks)
- d) Discuss how organizations can use Total Quality Management (TQM) to address emerging trends such as digital transformation in the 21st century. (5 marks)